

Figure 1

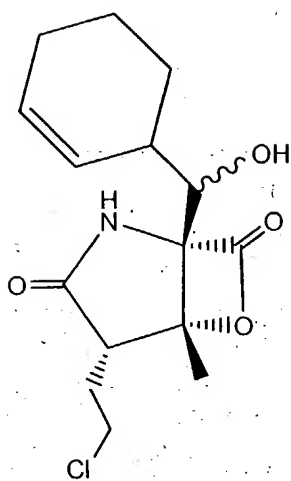
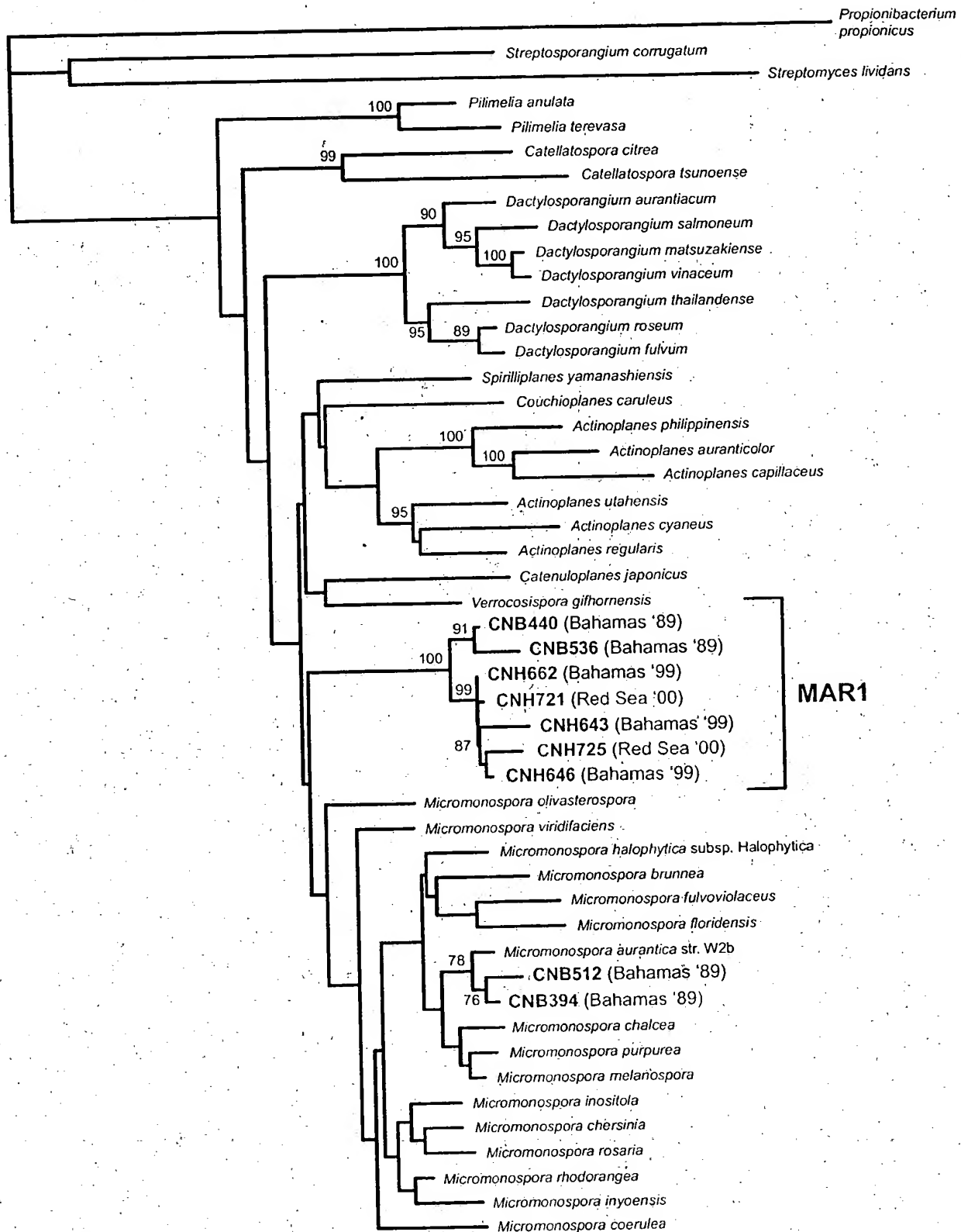


Figure 2: Phylogeny of MAR1



0.01

Figure 3: Etoposide (2)

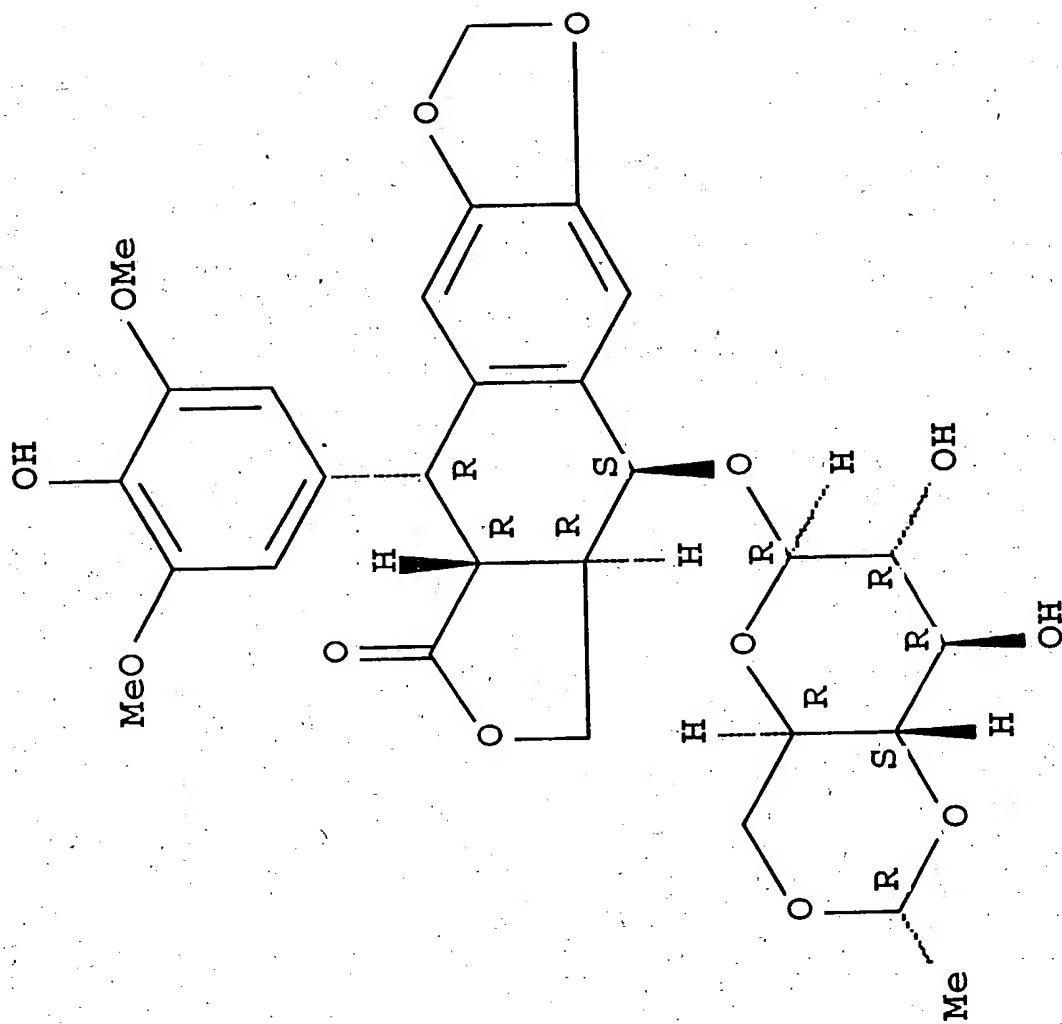


Figure 4: cytotoxic activity of salinosporamide A (1) and dose response curve

Comp8 (units/ml)

Sample	Wells	Sample#	OD	MeanValue	Ctr.AvgOD	%Survival	Concentration	IC50
Co03	C8	1	0.013	0.013	1.305	0.958	78.125	0.011
Co04	D8	2	0.044	0.044	1.305	3.335	19.531	0.011
Co05	E8	3	0.059	0.059	1.305	4.484	4.883	0.011
Co06	F8	4	0.105	0.105	1.305	8.011	1.221	0.011
Co07	G8	5	0.170	0.170	1.305	12.993	0.305	0.011
Co08	H8	6	0.304	0.304	1.305	23.266	0.076	0.011

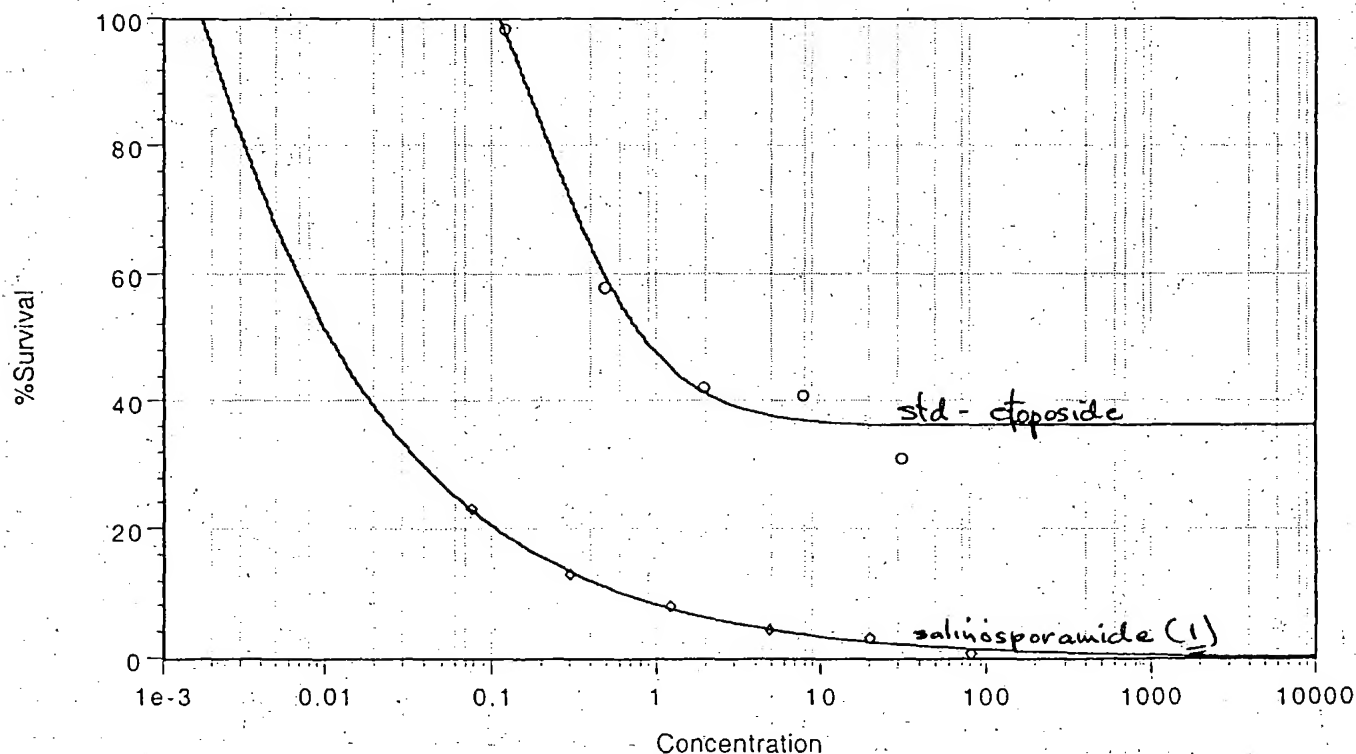
Standards (mg/ml)

Sample	Concentration	BackCalcConc	Wells	OD	Mean OD	%Survival	CV%	Ctr.AvgOD	IC50
Sta03	31.250	Range?	C12	0.413	0.413	31.621	0.0	1.305	0.828
Sta04	7.813	Range?	D12	0.542	0.542	41.510	0.0	1.305	0.828
Sta05	1.953	Range?	E12	0.557	0.557	42.660	0.0	1.305	0.828
Sta06	0.488	Range?	F12	0.760	0.760	58.222	0.0	1.305	0.828
Sta07	0.122	Range?	G12	1.287	1.287	98.620	0.0	1.305	0.828
Sta08	0.031	Range?	H12	1.615	1.615	123.764	0.0	1.305	0.828

Smallest standard value: 0.413

Largest standard value: 1.615

Standard Curve



$$y = ((A - D) / (1 + (x/C)^B)) + D$$

	A	B	C	D	R ²
◆ Comp.8 (Comp8: Concentration vs %Survival)	2183.255	0.398	8.34e-7	0.073	0.997
○ std (Standards: Concentration vs %Survival)	133.236	1.227	0.192	36.119	0.993

Figure 5: Isolation of salinosporamide A (1), separation scheme

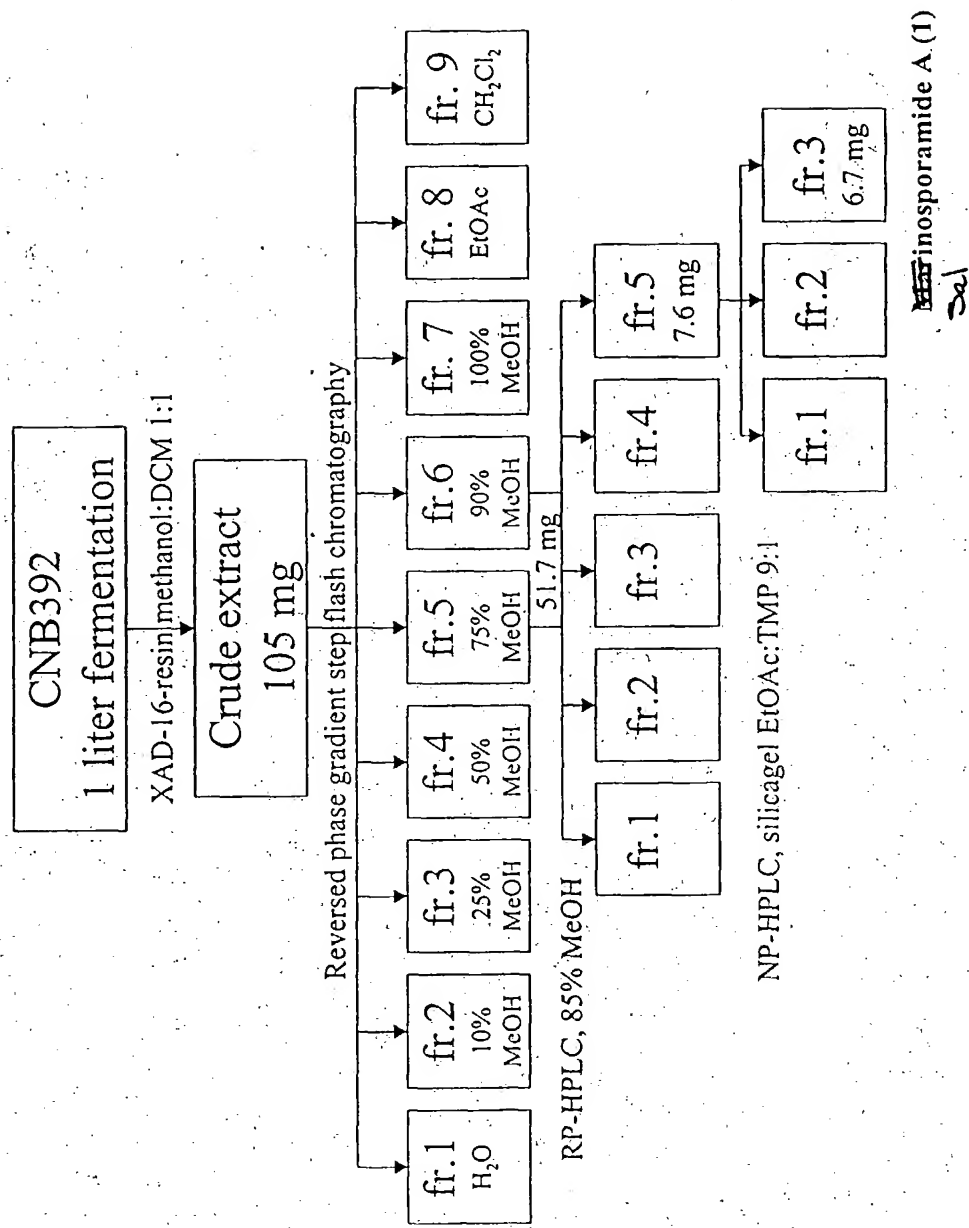


Figure 6: ^1H -NMR of salinosporamide A (**1**), 300 MHz, d_5 -pyridine

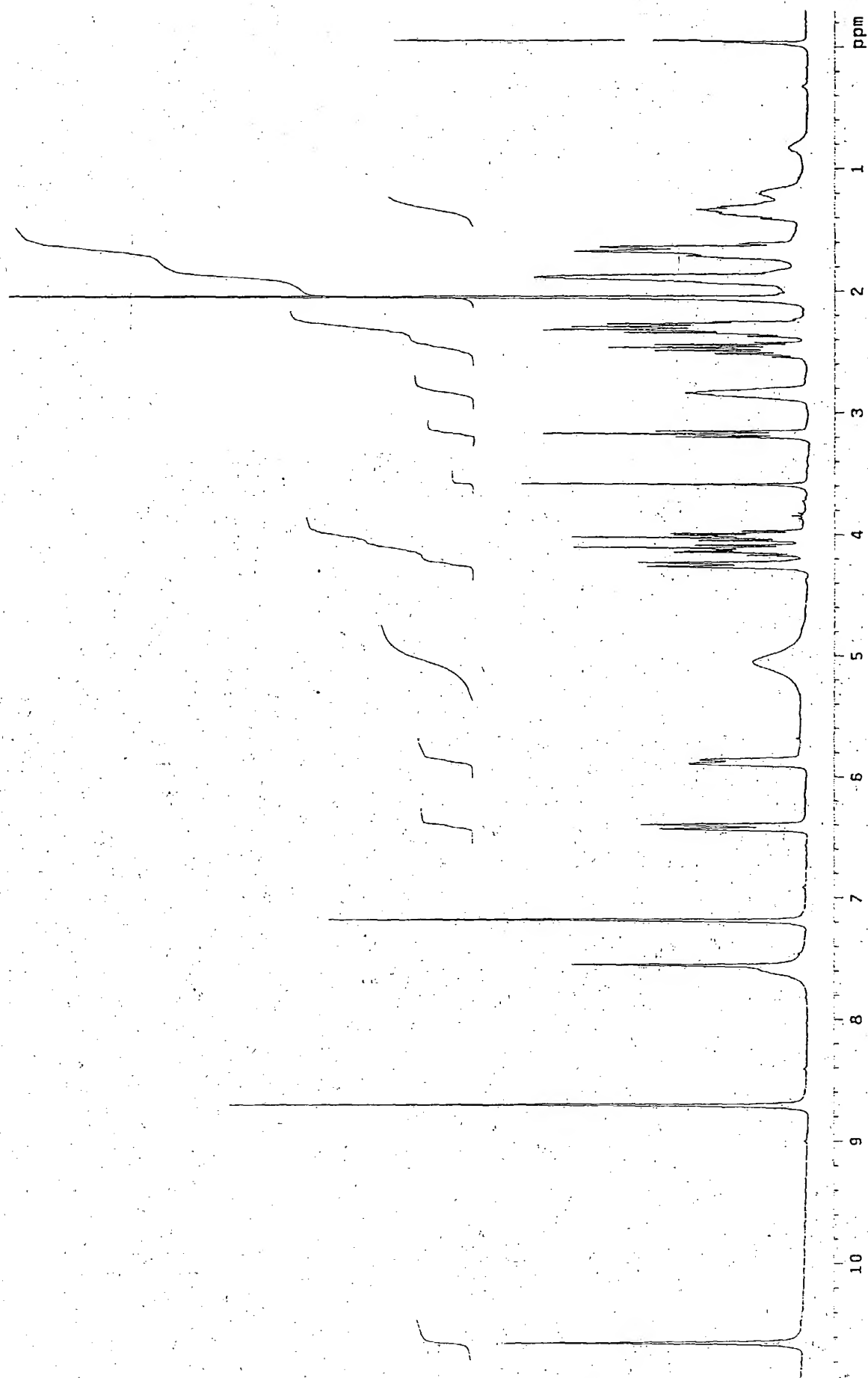


Figure 7: ^{13}C -NMR of salinosporamide A (1), 400 MHz, d_5 -pyridine

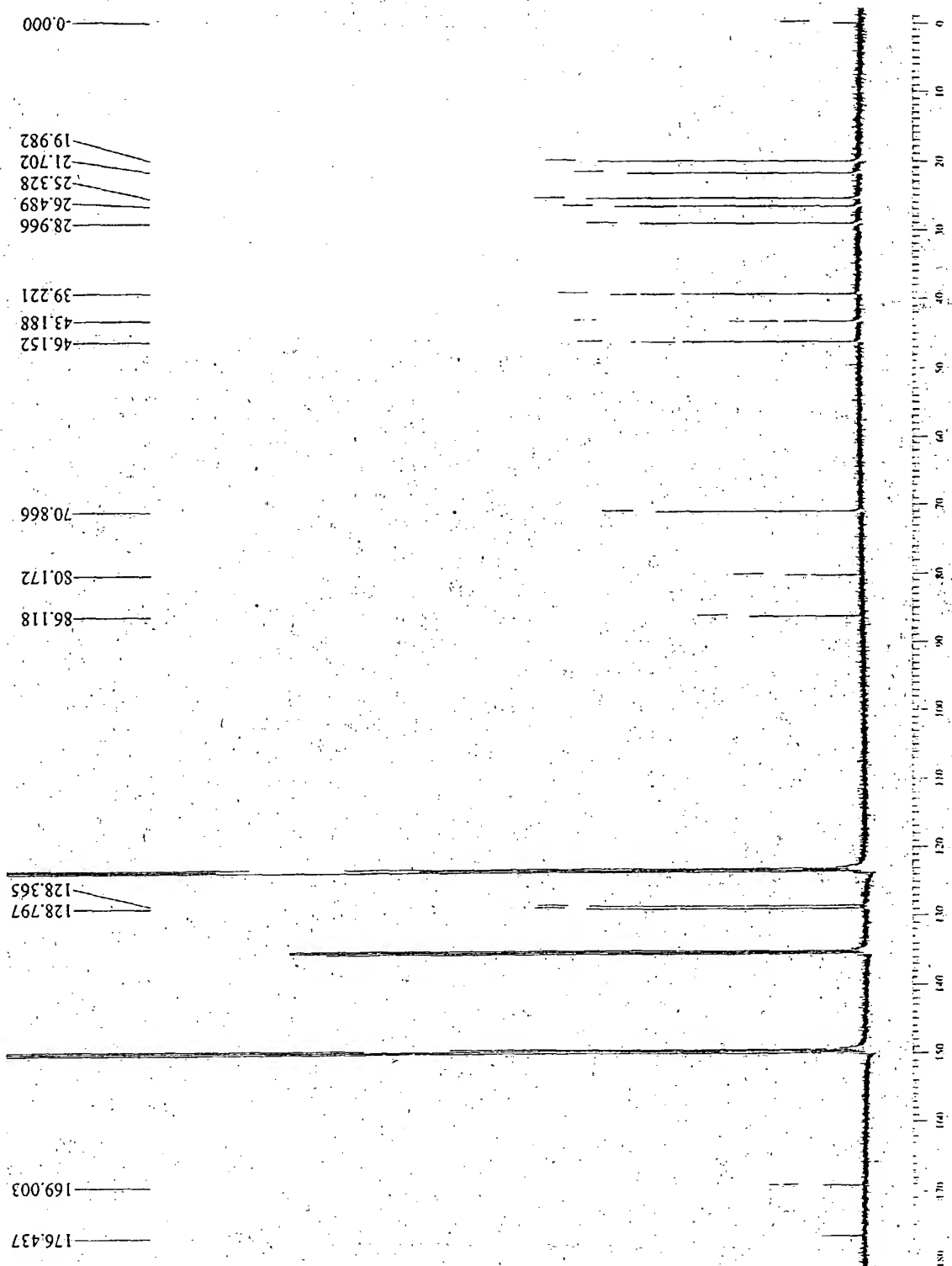


Figure 8: HMQC of salinosporamide A (1), 300 MHz, d₅-pyridine

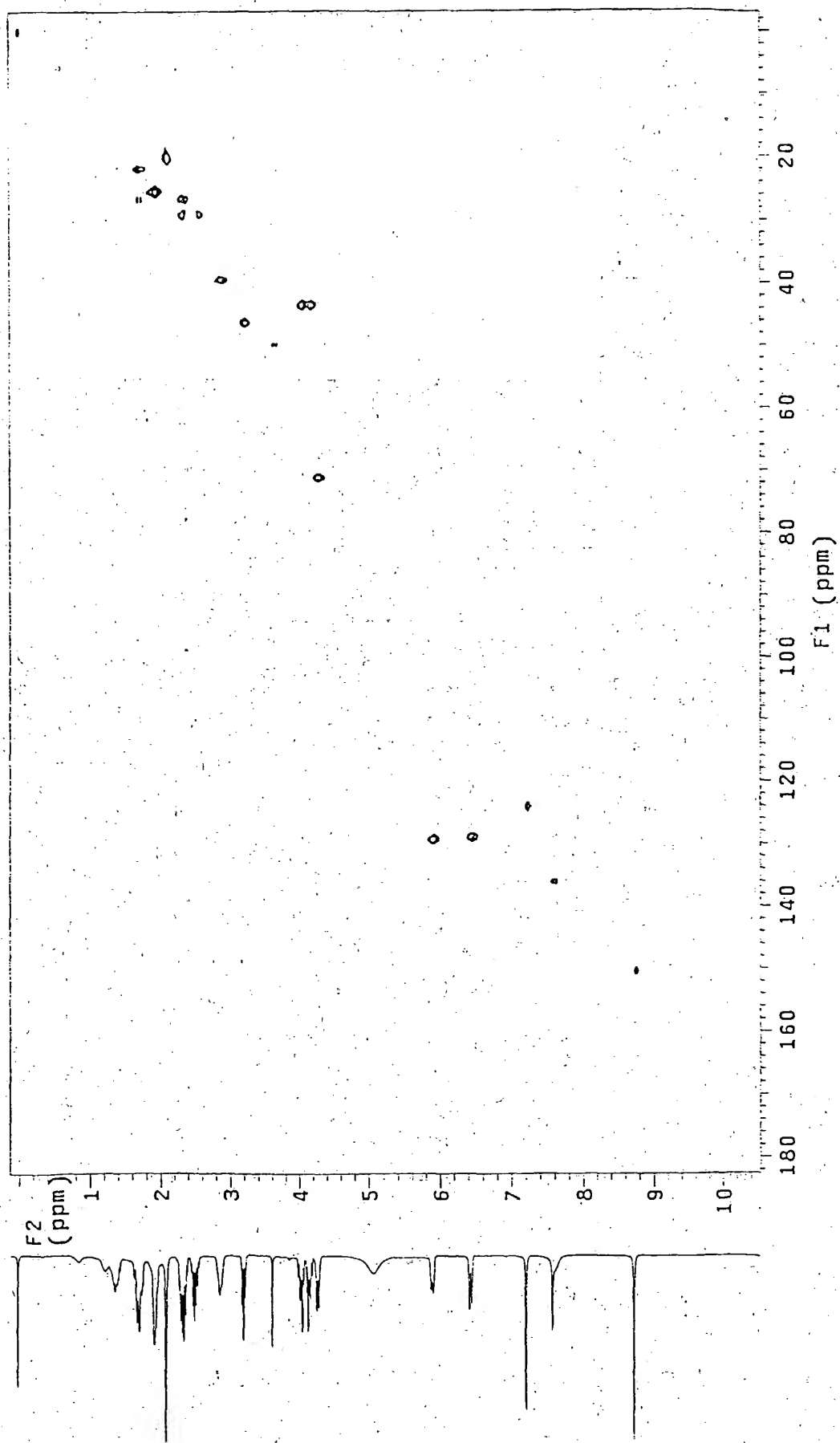


Figure 9: HMBC of salinosporamide A (**1**), 300 MHz, d₅-pyridine

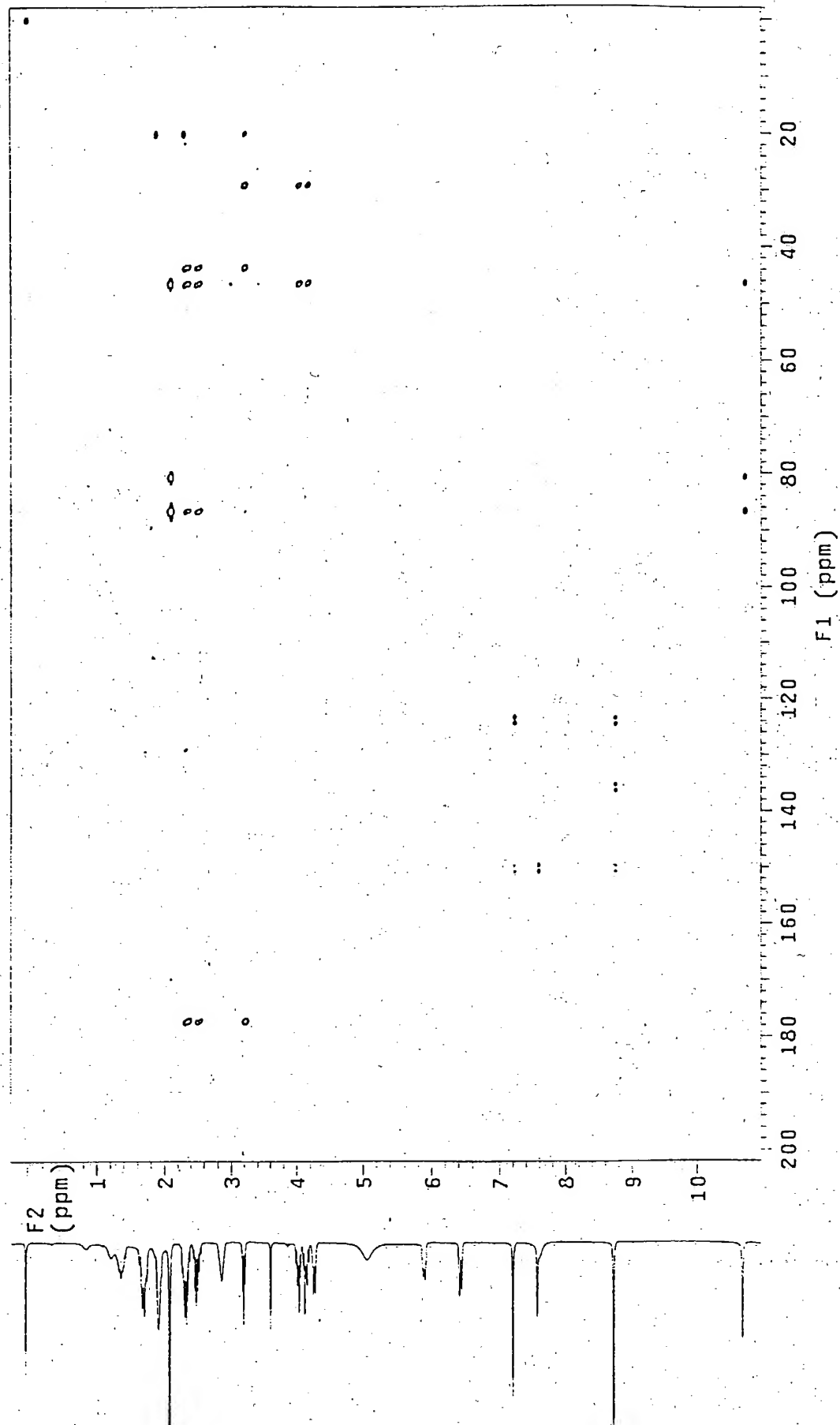


Figure 10: H,H-COSY of salinosporamide A (1), 300 MHz, d₅-pyridine

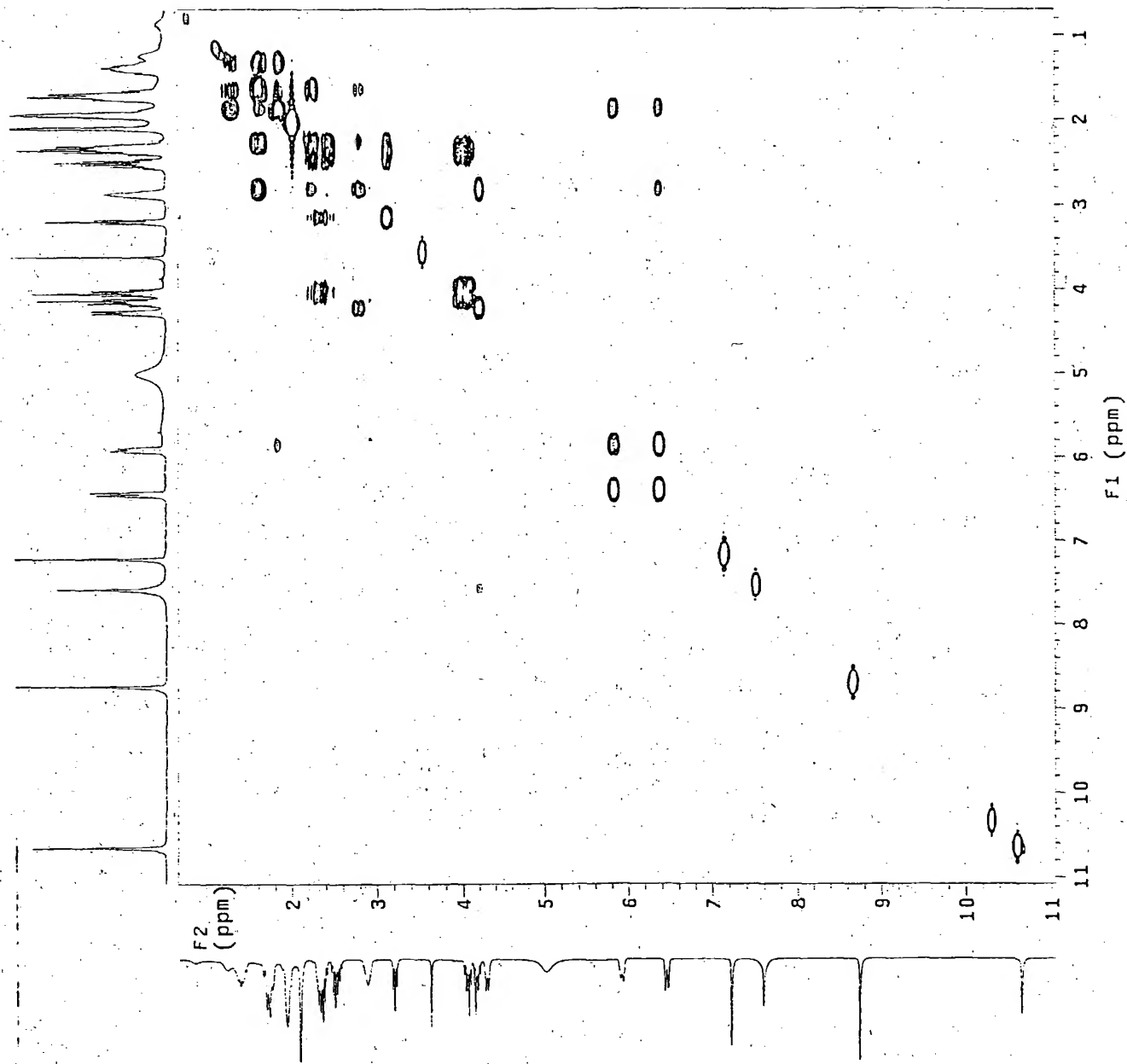


Figure 11: NOESY of salinosporamide A (**1**), 300 MHz, d₅-pyridine

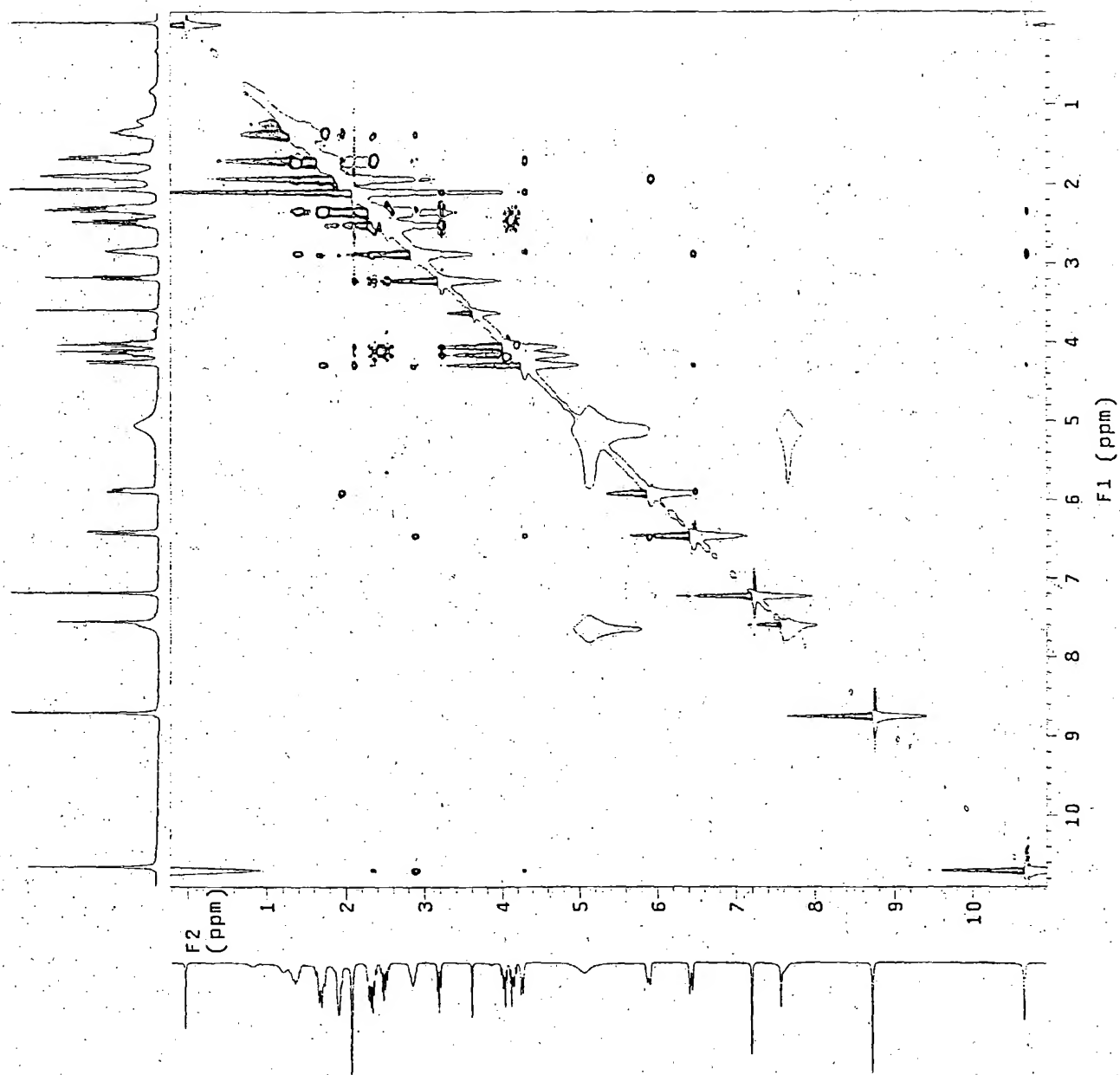


Figure 12: Mass spectrum (ESI-mode) of salinosporamide A (1)

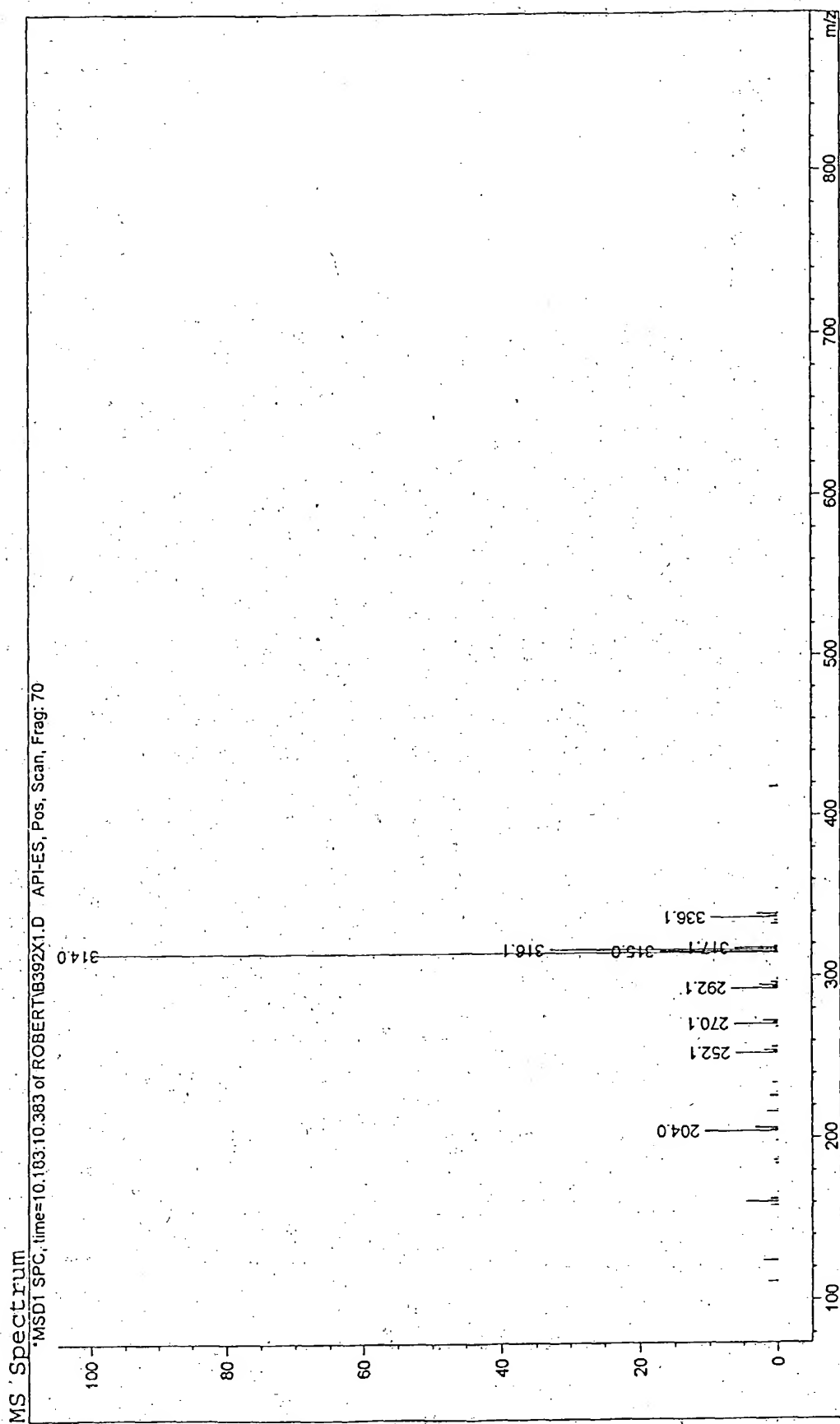
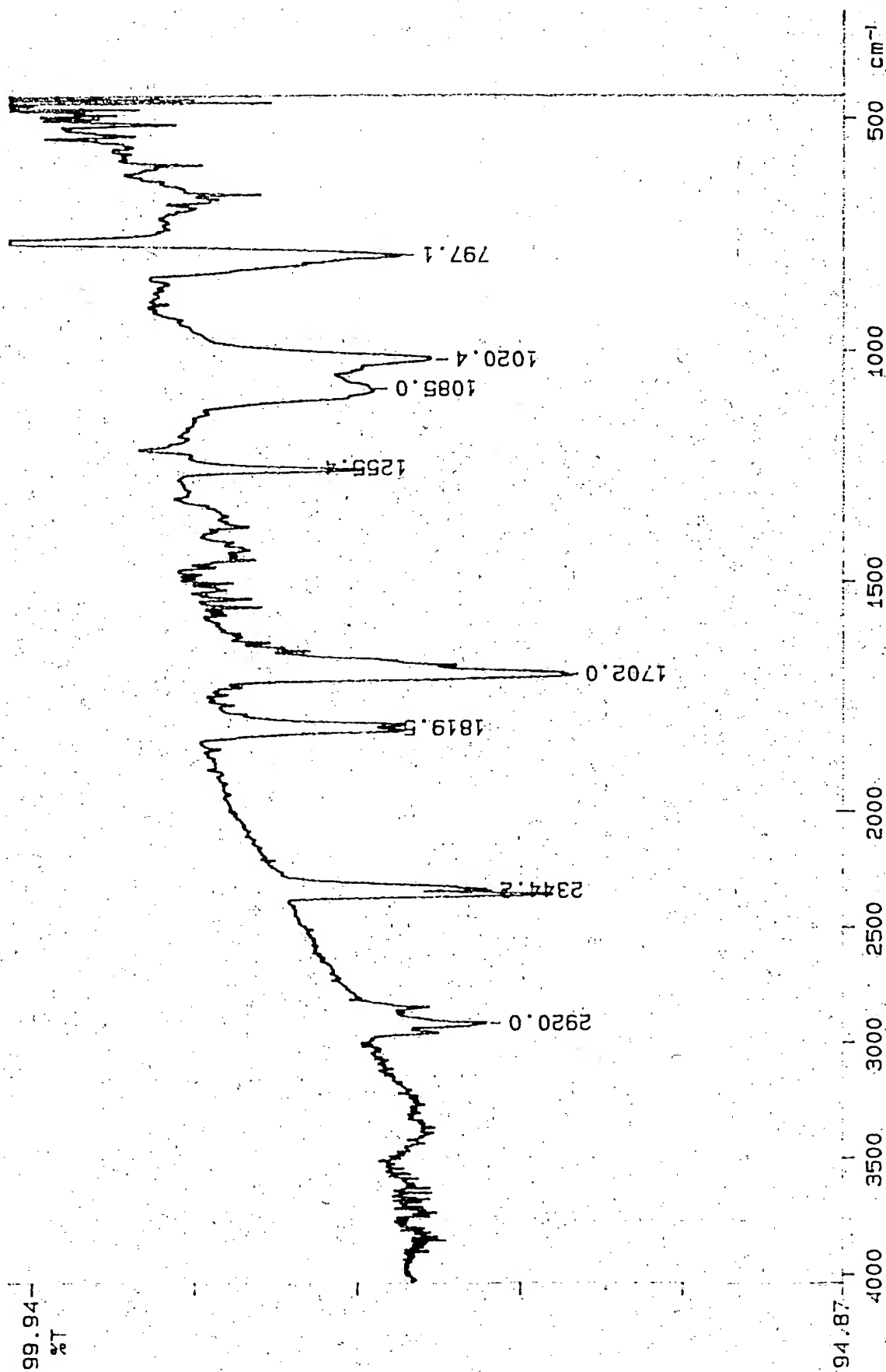
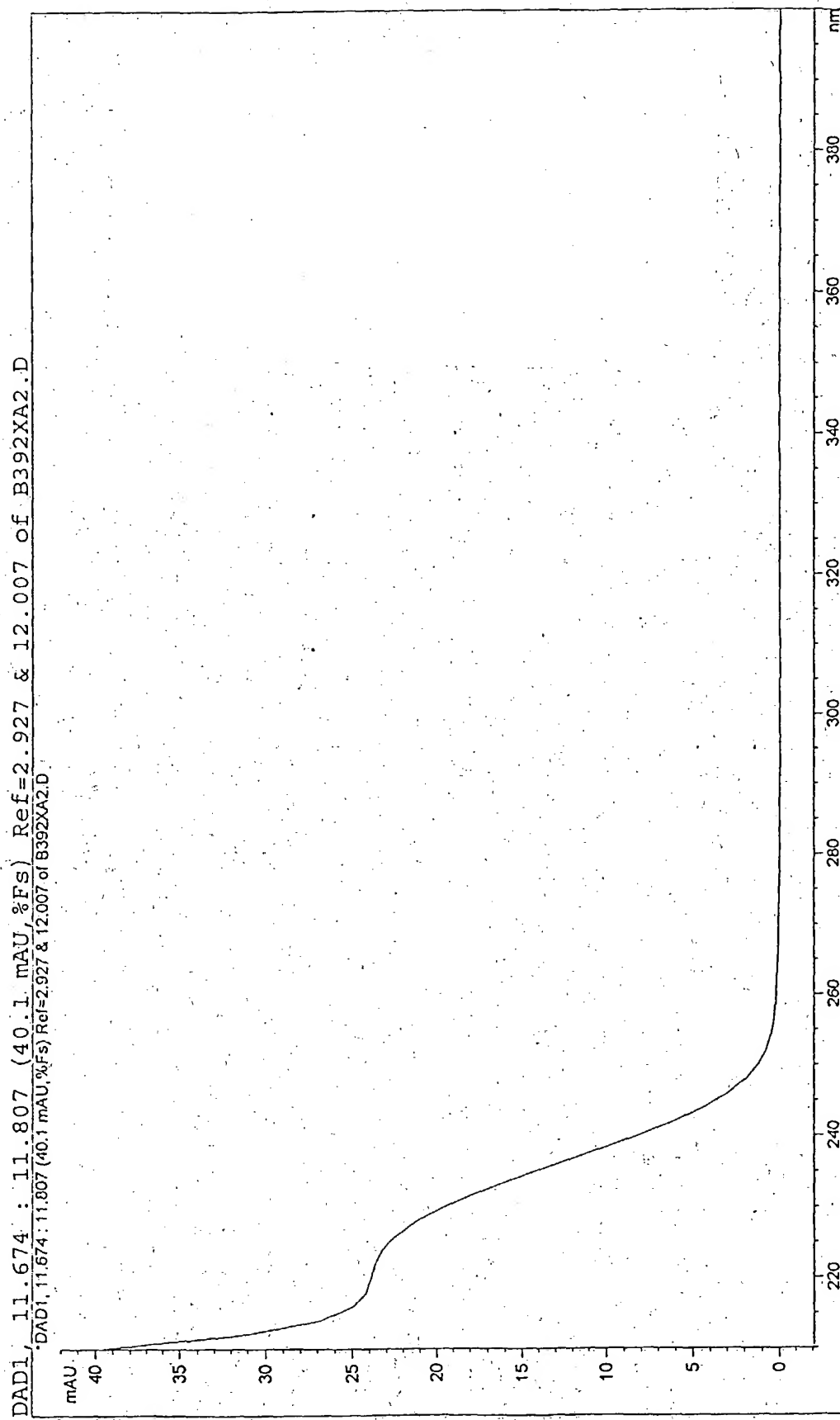


Figure 13: IR spectrum (NaCl/CHCl₃ film) of salinosporamide A (1)



01/01/19 10: 47
X: 16 scans, 4.0cm-1

Figure 14: UV spectrum (LC-DAD, CH₃CN:water 2:1) of salinosporamide A (**1**)



Position 16S rDNA	<i>Actinoplanes</i>	<i>Micromon- ospora</i>	<i>Dactylo- sporangium</i>	<i>Catellato- spora</i>	<i>Pillimelia</i>	<i>Catenulo- planes</i>	<i>Couchio- planes</i>	<i>Spirilli- planes</i>	<i>Verrucosi- spora</i>	<i>Marinospora</i>
207	U	U	U	U	C	U	U	U	U	A
219	C	C	C	C	U	C	C	C	C	U
279	A	A	A	(A/U)	A	A	A	A	A	G
366	A	(A/G)	A	A	A	A	A	A	A	C
467	A	A	(G/A)	A	G	(G/A)	A	A	A	U
468	A	A	A	A	A	A	A	A	A	U
546	G	G	G	G	A	G	G	G	G	A
615	C	(G/C)	C	(U/C)	U	(C/U)	C	C	U	U
1116	C	C	(C/U)	C	C	C	C	C	C	U
1456	A	A	A	A	A	A	A	A	A	G

Figure 15